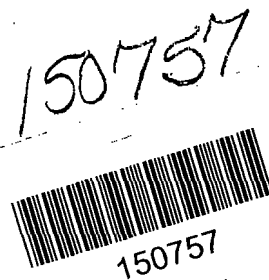


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Site: Container Recycling
ID #: 15006576995
Break: LS
Other: 6-1-97

***Phase II Investigation Report
Container Recycling Inc. Property
1161 South 12th Street
Kansas City, Kansas***

***Prepared for
Premier Bank***

June 1997



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**Phase II Investigation Report
Container Recycling Inc. Property
1161 South 12th Street
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1.0 Introduction

This report describes the results of the Phase II Investigation of the Container Recycling, Inc. Property (Property) located at 1161 South 12th Street, Kansas City, Kansas as shown in Figure 1.. This Phase II Investigation was conducted to provide a characterization of the environmental conditions associated with the Property. The Phase II Investigation is based on the Phase I Assessment Report (Barr, 1977).

The Phase I Investigation and subsequent report were completed for Consolidated Container Corporation and Norwest Bank (lender) to summarize available history and regulatory information pertaining to the past operating activities at the site and current conditions of the property. Based upon conclusions and recommendations in the Phase I Assessment Report, Consolidated Container Corporation determined that further investigation at the Property would be appropriate in assessing recognized environmental conditions at the Property. The Phase I Investigation conclusions identified/recognized the following environmental conditions at the Property:

- 10,000-gallon and 8,500-gallon underground storage tanks (USTs) that were removed in 1990
- Aboveground storage tanks (ASTs); two existing and one possibly removed in the past
- Empty drums stored on the east end of the Property and paint chips over the surface soils in this area
- Petroleum-stained soils along the outside conveyor area used to transfer drums from outside to inside the building
- Various containerized and non-containerized wastes and process waste sludges in the building
- Areas of the property that appear to have been filled over time
- An existing sludge storage pit
- Two mounted transformers near the southeast corner of the building
- Asbestos-containing materials (ACM)

Based on the conclusions of the Phase I Investigation, the following recommendations were made for further investigation:

- Collect soil samples from the former UST area
- Sample stained soil around the conveyors
- Collect soil samples beneath the cracked concrete inside the building
- Collect soil samples around the concrete sludge storage lagoon
- Collect soil samples in the area of drum storage on the east side of the property
- Collect soil samples from the south end of the building near an AST that may have previously existed
- Collect groundwater samples to get some groundwater quality background at the site
- Perform an electromagnetic (EM) survey

The general scope of work for the Phase II Investigation was based on the Phase I recommendations along with input from Consolidated Container Corporation. Some modifications of the scope of work were made as the work progressed based on field conditions. Figure 1 is a site location map, Figure 2 shows the location of borings inside and outside the building, and Figure 3 outlines areas from the EM survey that indicate the potential existence of subsurface materials not consistent with the most prevalent type of fill at the Property.

2.0 Background

2.1 Property Description

The Property is located in the southeast quarter of Section 21, Township 11 South, Range 25 East (Figure 1). The property address is 1161 South Twelfth Street, Kansas City, Kansas. The property is located on the east side of South 12th Street directly north of the Kansas River in the central portion of Kansas City, Kansas in an area developed for industrial use. The property is a rectangular-shaped 20-acre lot with a one-story concrete block and steel construction building located on the west end of the Property. Vehicular access to the Property is via South 12th Street. The 50,550 square feet building was constructed in 1965 and is used for both office and drum processing. The entire eastern portion of the Property is used for drum storage.

The current zoning of the Property and surrounding properties is heavy industrial. The landscape in the vicinity of the Property is generally level with a surface elevation approximately 750 feet above mean sea level. The Property is located adjacent to the Kansas River and shallow stratigraphy beneath the Property consists of fill material above sand and gravel stream deposits.

No groundwater quality data exists for the Property. Groundwater under the Property is not used for drinking water. No private or municipal wells that serve as a potable water source are located in the vicinity of the Property. The Property is connected to sanitary sewers, municipal water, natural gas, and electricity utilities. The municipal drinking water supply for Kansas City is derived from the Missouri River.

An asphalt parking lot and driveway surround the building on the western side of the Property and the remaining areas of the Property consist of a gravel surface with limited vegetation along the edges.

2.2 Property History

The Property was originally owned by Henry Sims prior to its development in 1965. Based on information obtained from interviews, the Property was developed in 1965 as a drum reconditioning, recycling, and storage facility. International Mineral and Chemical bought the facility and established Great Lakes Container. After a period of time, Irving Rubin bought the

facility and continued operations as Great Lakes Container. In 1986, major partner Richard Greenwald and silent partner Ed Handley bought the facility, changed the name to Container Recycling, Inc. and continued operations until November 1996, when the facility was shut down. From conception the facility has been used for the same industrial use.

Following completion of the Phase I Investigation Report, conversations with facility personnel revealed new information concerning the site's history. In the early 1950s, the entire river bottoms area including the Property was inundated by flood waters. Following the flood, the Army Corps of Engineers built a levee system to protect the bottoms area. The current levee along the southern edge of the Property was constructed at that time. A local steel mill utilized the area between the levee and their facility to dispose of automobile fluff in the 1950s and 1960s. "Fluff" is created when entire vehicles are shredded in a large "pulverizer." The "pulverizer" (employees' term) reduces the vehicle to very small pieces. A magnet removes the recyclable steel and the non-metallic "fluff" is discarded. The container recycling facility was built on this fluff material. The fluff fill material averages about 15 to 18 feet deep over the entire site. Only a small area in the north central portion of the site was not utilized for fluff disposal. Other types of fill material such as concrete, dirt, sand, and gravel are also present on site but the vast majority of the fill consists of fluff. Construction of the drum reconditioning building began in 1964 and was completed in 1965. It is not known if additional fluff was brought to the site once operations began.

3.0 Investigation Methods

3.1 Scope of Work

The scope of work for this project involved the advancement of Geoprobe borings for the collection of groundwater and soil samples for laboratory analysis. The samples collected were then used to estimate physical and quantitative extents of contamination at the Property from past operation activities. A total of 20 Geoprobe borings were placed over the Property. Fourteen 4-foot borings were advanced and soil samples collected. Six were advanced to groundwater with both groundwater and soil samples collected. It was anticipated that groundwater would be at approximately 20 feet but the first boring advanced to groundwater was approximately 45 feet. At that depth, there were difficulties in obtaining a sample by use of both a vacuum pump and by hand. One sample was collected; however, due to the methods, much of the volatiles that may have been present were likely released. For this reason, no additional water samples were collected and the remainder of the investigation focused on soil samples.

For the purposes of this investigation, the Property was divided into three areas: (1) drum storage area—the area on the east side of the Property historically used as drum storage; (2) drum processing area—the area outside the east end of the building in which drums were handled, transferred inside the building via conveyors, and placed inside the furnace, and the areas where tanks and equipment used in the drum reconditioning process were stored; and (3) inside building—process area inside the building where there were noticeable cracks in the concrete floor. Figure 2 shows the outline of these three areas.

3.2 Groundwater Sampling Protocols

One problematic issue encountered in the field was the removal of groundwater from the stem of the probe. The Geoprobe crew utilized a vacuum pump and a long plastic tube to pump the water. However, because the groundwater was at a depth greater than expected (43.45 feet), the vacuum pump could not pull the water to the surface. Thus, the crew had to pull the plastic tube out of the probe by hand and try to collect any water that remained in the tube. This was a slow process that yielded very small amounts of groundwater. Further, the vacuum placed on the water caused gases in the water to be released prior to collection. This may have reduced the levels of organics detected during sample analysis. In addition, subjecting the water sample to a vacuum

resulted in the sample being very foamy. As a result, it was impossible to completely remove headspace from the 50-ml vials. After a few hours, the very small bubbles suspended in the water sample would collect near the top of the container and form a larger air bubble. Thus giving volatile organics in the water sample an opportunity to evaporate into the headspace and further reduce the measured levels of contaminant in the sample.

Because the groundwater was at a depth greater than anticipated, the difficulty in obtaining groundwater samples, and the potential unreliability of the analysis results, a decision was made in the field to discontinue groundwater sampling with the Geoprobe. In total four 50-ml vials and a 250-ml bottle of groundwater were collected from the sampling location by the drum conveyor. The containers were labeled C2W. The exact location of the sample is indicated on the attached site diagram.

Later, while collecting soil sample DSA16, a pocket of perched groundwater was encountered at a depth of 17 feet. Four 50-ml vials and a 250-ml bottle were filled with groundwater from this location. Once again the water was foamy and it also carried a very high level of suspended solids. The sample containers were labeled DSA16W. See Table 1 for a summary of the groundwater sampling parameters and Table 2 for the analytical results. Figure 2 shows the locations of these samples.

3.3 Soil Sampling Protocol

The Geoprobe unit was utilized to collect all but three soil samples (DSAM1, DSAM2 and DSAM3). With the Geoprobe, a 4-foot-long, 2-inch-diameter hollow-stem stainless steel probe with a clear acetate liner is driven into the soil. After the probe reached the specified depth (4 foot, 8 foot, 12 foot, 16 foot, and 20 foot) it is retrieved and the acetate liner is removed. The ends of the liner tube were capped and the exterior was marked with the boring number and the sample depth. A new liner was inserted into the probe, the probe was lowered into the hole and the process was repeated. The end result is a continuous soil sample that extends from the surface to the bottom of the boring. The clear acetate liner allows the sample collector to observe changes in soil composition and visible indicators of contamination prior to opening the tubes.

Most of the shallow (0-4 foot) soil probes were completed on Monday, February 17, 1997. See Appendix A for the chain-of-custody form for sample collection dates. The acetate tubes were capped to limit volatilization. The cores were kept with each Geoprobe unit or the mobile laboratory until the end of the day. Later in the afternoon the cores were cut open with a utility

knife. A photoionization detector (PID) was utilized to identify the portions of the continuous sample that exhibited the highest levels of volatile organic contamination. The soil with the highest readings from each sample was then collected into 2-ounce glass jars. Two or four glass containers were utilized for each sample as specified in the sampling plan. The sample containers were labeled with the corresponding sample number and placed into a prechilled cooler for shipment to the laboratory.

The deeper probes were conducted on Tuesday, February 19, 1997. Sampling protocol followed the discussion above except that the acetate tubes were opened and sampled upon completion of each boring to prevent the buildup of a large number of sampling tubes.

Several voids were encountered during the collection of samples DSA15, DSA16 and DSA17. The origin of the voids is unknown but their presence was unmistakable. Because of the loose fill material and the voids encountered during the probing, it became difficult to determine with any certainty the depth at which a particular sample was collected. For this reason the sample depth is listed as "unknown" on Table 3.

Samples DSAM1, DSAM2 and DSAM3 were collected by hand using precleaned hand trowels. All three samples are surface soil grab samples collected from areas that appeared to have been impacted by site activities. DSAM1 was collected near a drum conveyor. DSAM2 was collected from an area of stressed vegetation and DSAM3 was collected near an area of dried paint. See Table 3 for a summary of the soil sampling activity. Figure 2 shows the location of the soil samples.

3.3.1 Drum Storage Area

There were a total of 16 Geoprobe borings advanced in the drum storage area for the collection of subsurface soil samples. Three surface soil samples were also collected. The Geoprobe unit was utilized to collect all soil samples except the three surface soil samples (DSAM1, DSAM2, and DSAM3). Thirteen shallow borings (0 to 4 feet) and three deeper soil borings (0 to 20 feet) were advanced. Samples were collected based on the results of continuous PID readings of volatile organics. Field screening readings were taken in parts per million (ppm). Table 3 shows the field screening results. Soil samples were collected and analyzed for the shallow borings and from the six borings with the highest PID readings. These samples were analyzed for polynuclear aromatic hydrocarbons (PAHs), Resource Conservation and Recovery Act (RCRA) metals, volatile organic compounds (VOCs), and diesel range organics (DRO). Table 4 shows the analytical results.

3.3.2 Drum Processing Area

The soil sampling and analysis within the drum process area was targeted to areas of operation identified in the Phase I Investigation as recognized environmental conditions. These locations were: (1) the area around the furnace; (2) the concrete sludge storage lagoon; (3) the former underground storage tank area; (4) an aboveground storage tank area; and (5) the conveyor area. Figure 2 shows the borings advanced in the areas and Table 5 shows the analytical results of the soil samples collected in the drum processing areas. The boring advancement methods were the same as those for the drum storage area.

3.3.3 Inside Building

Three soil samples (IS1, IS2, and IS3) were collected underneath the building footprint. The locations were selected to correspond to process areas and observed cracks in the cement flooring. Figure 3 shows the locations of these borings. Table 6 shows the analytical results.

3.4 Sampling Plan Changes

With the exception of the deletion of the groundwater sampling activity the majority of the work plan was implemented as written. Only a few deviations from the work plan took place. The samples that varied from the plan included UST1, DSA15, DSA16, DSA17, and C1. A brief explanation of each follows:

Discussions with Wayne Myslivy, Plant Manager, revealed that the oldest underground storage tank was formerly located just west of the water treatment plant. Since it was believed that the oldest tank had the greatest potential for leakage a sample was collected from that area instead of the area east of the sludge lagoon as specified in the sampling plan. The sample was labeled UST1.

The sampling plan called for four deeper probes to be scattered around the old drum storage stockpile area. Based on discussions with plant personnel, discussions with Consolidated Container, and noticeable organic odors, a decision was made to concentrate the subsurface investigation within a smaller area of concern. Samples DSA15, DSA16, and DSA17 were collected in this area. A fourth deep sample was not collected due to time constraints.

The sampling plan called for three subsurface soil samples to be collected around the conveyor belts. The area was visibly impacted by on-site activities. Only two subsurface soil samples were

collected in the area due to a breakdown of the sampling equipment. Thus sample C1 was never collected.

Weather conditions impacted sampling activities. The wind was strong and gusty from the southwest with sustained winds of 20 to 25 mph and gusts up to 30 to 35 mph. The strong wind had an impact on how the samples were evaluated in the field. It was originally thought that a PID would be utilized to establish the level of organic vapors in each borehole following sample removal. However, the strong gusty winds made borehole measurements unreliable and thus they were not performed.

4.0 Geophysical Survey

4.1 Investigation Methods

The geophysical survey was performed by recording EM conductivity measurements across the investigation grid shown on Figure 4. Both quadrature phase (conductivity) and in-phase data were recorded using a Geonics EM-31 conductivity meter configured for vertical dipoles and continuous recording mode at 1-second recording intervals. This resulted in data being recorded about every 2.5 feet along each survey line. The in-phase mode is generally considered to be a better detector of buried metal containers, although both phases respond to metal. Data were recorded along east-west and north-south trending grid lines at spacings of between 25 and 50 feet. The EM-31 has a maximum depth of investigation of about 20 feet.

To accurately record the location of EM data collection, a grid system was placed over accessible portions of the Property. Location and length of grid lines were limited by numerous site obstructions including truck trailers, barrel piles, and miscellaneous metallic debris. In general, data were recorded more densely in the western portion of the Property. Two areas, referred to as Area 1 and Area 2, were included in the survey and are shown on Figure 4. Areas 1 and 2 were surveyed using separate grid systems.

4.2 Investigation Results

The results from the EM survey are shown on Figure 4. Figure 4 displays the limits of barrel piles, truck trailers, and other materials distributed across both the eastern and western grids. EM anomalies displayed can be grouped into three general types. Those definitive of interference from surface materials, those probably caused by interference from surface materials, and those not associated with any obvious surface interference.

In both Areas 1 and 2, all of the largest conductivity and inphase anomalies detected during the EM survey, can be directly correlated to the presence of metallic objects at the surface, generally either truck trailers or barrel piles.

Smaller anomalies are also present, most of which appear to have been caused by metallic materials at the surface. The two small anomalies located in the northwest portion of Area 1,

around grid location 1200 north, 3025 east (Location #1), and 1150 north, 3075 east (Location #2), were likely caused by the rebar in the pile of reinforced concrete at these locations. The small anomaly in Area 1, at location 1100 north, 3150 east (Location #3), was likely caused by the scattered drums and metallic debris exposed at the surface at this location. The small anomaly at location 1025 north, 3550 to 3590 east (Location #4), in Area 1, was most likely caused by scattered surface drums and metallic materials at this location. In Area 2, more moderate anomalies in the eastern portion of the grid, in the area 900-1000 north and 950-1100 east (Location #5) were probably caused by scattered metallic materials at the surface. Another anomaly in Area 2, at location 990 north, 1350 east (Location #6), is most likely associated with the drum pile immediately to the north of this location.

Three small anomalies in Area 1, at locations 1025 north, 3325-3350 east (Location #7), 1025 north, 3200 east (Location #8), and 1235 north, 3450 east (Location #9), cannot be correlated directly to surface interference and may warrant further investigation. One small anomaly in Area 2, at location 950 north, 1710 east (Location #10), also cannot be correlated directly to surface interference and may also warrant further investigation. Whether or not these anomalies were caused by the presence of buried drums cannot be determined using EM methods.

The ubiquitous presence of metallic materials across the grounds of the Property produced an extreme amount of interference with the EM data collection process. This interference severely hindered the effectiveness of the EM survey to detect the possible presence of buried materials. In addition, large portions of the Property were inaccessible due to the presence of truck trailers, and drum piles. The high degree of interference found across all portions of the Property, and the inaccessibility of much of the Property, does not allow for effective conclusions to be made regarding the possible presence or absence of buried materials across most of the Property through use of the EM data collected.

5.0 Summary and Conclusions

5.1 Analytical Results Summary

The following discussion summarizes the analytical results for each area.

Groundwater

The groundwater samples C2W and DSA16W were analyzed for RCRA metals and DRO. VOCs and SVOCs were not analyzed because of the sample collection problems discussed previously. Sample C2W was collected at a depth of 43 feet between the cutter building and the furnace. The sample results indicated silver, arsenic, barium, cadmium, chromium, and lead above their respective detection limits.

Sample DSA16W was collected at a depth of 17 feet below ground surface in the drum storage area. The sample results indicated silver, arsenic, barium, cadmium, chromium, mercury and lead above their respective detection limits. Barium, cadmium, chromium and lead appear to be at fairly high concentrations when compared to federal drinking water criteria. Groundwater in this area is not used for drinking water and so this comparison may not be appropriate to groundwater use in this area.

Drum Storage Area

Soil boring samples DSA3, DSA4, DSA15 and DSA17 reported analytical results that indicated the presence of petroleum products, including benzene, toluene, xylenes, and ethylbenzene (BTEX) and naphthalene. Samples DSA3, DSA4, DSA15, DSA17, DSAM2 and DSAM3 indicate elevated concentrations of lead ranging from 1400 to 9200 mg/kg. Sample DSA15 shows elevated concentrations of arsenic, cadmium, chromium, mercury and lead. Samples DSA3, DSAM2, and DSAM3 show elevated concentration of other metals besides lead. Samples DSA3, DSA4, DSA9, DSA15 and DSA17 show elevated concentrations of DRO. PAH compounds were detected above detection limits in soil samples DSA3, DSA9, DSA14, and DSA15.

Drum Processing Area

Soil boring samples C3, C4, FA1, and SA1 indicate concentrations of BTEX above detection limits. Sample C3, C4, UST1, and SA1 reported elevated concentrations of lead ranging from 2800 to 4000

mg/kg. Samples C3, C4, UST1 and SA1 show elevated concentrations of other metals. Samples C3, C4, UST1, FA1, AST1, SA1 reported elevated concentrations of DRO ranging from 2200 to 6500 mg/kg.

Inside Building Area

Samples collected under the building included sample IS2 and IS3. IS2 reported tetrachloroethene above detection limits. No VOC constituents were reported for soil sample IS3. Samples IS2 and IS3 report concentrations of metals above detection limit. Sample IS1 was collected however it was not analyzed.

5.2 Quality Assurance Summary

All laboratory data for the analyses of the samples collected in February 1997 at the Property were provided by Legend Technical Service, St. Paul, Minnesota. The chemical parameters analyzed by Legend included SVOCs, VOCs, PCBs, DRO, and metals. The data quality evaluation involved the review of aspects of sample collection and laboratory analytical performance and is summarized below. The laboratory analytical data are summarized and included in Tables 2, 4, 5, and 6.

The individual aspects of the data quality evaluation are summarized below:

- **Holding Time:** All soil samples were analyzed within the appropriate U.S. Environmental Protection Agency (EPA) holding times.
- **Blanks:** No target parameters were detected in any of the laboratory method blanks except for acetone which was reported at 0.51 mg/kg. While methylene chloride was not detected in the method blanks, it is commonly present in the laboratory air and frequently contaminate samples. The contamination can occur during the sample storage, preparation, or analytical stages of laboratory sample processing. As a result of the data validation process, the data qualifier "b" (potential false positive value) was assigned to all samples with detected concentrations of acetone and/or methylene chloride.
- **Surrogates:** All volatile surrogate recoveries met the acceptance criteria.

For the semivolatile surrogate recoveries, several soil samples had one or more recoveries outside of the control limits. This was indicative of the complex nature of the soil matrix

(high DRO concentrations). No data qualifiers were assigned to the semivolatile data, however sample constituent matrix effects may have been present in some samples.

- **Matrix Spikes:** Matrix spike data was not provided in the laboratory report since it is not included with the level of data package requested.
- **Duplicates:** No field duplicate samples were collected.

5.3 Conclusion

Based on the Phase II Investigation, the soils in the drum storage area of the Property have been significantly impacted by elevated levels of lead and organic contaminants. The source of these contaminants appears to be associated with the fill (fluff) brought onto the Property from a nearby facility. Shallow soils in the drum processing area near the furnace and along the conveyer belts have been impacted by petroleum releases. At the time of the Phase II Investigation, all uncontainerized wastes and waste sludges in the building had been washed into the sludge treatment system. Containerized wastes still were present in the building at the time of the Phase II Investigation.

6.0 References

Barr, 1997. Phase I Assessment Report on Container Recycling Inc. Property, 1161 South 12th Street, Kansas City, Kansas. Prepared for Consolidated Container. January 1997.

Tables

Table 1
Groundwater Sampling Summary
Container Recycling, Inc. Property

SAMPLE #	SAMPLE CONTAINERS	GROUNDWATER DEPTH	NOTES
C 2	4-50 ml vials 1-250 ml bottle	43.45'	Groundwater sample was collected using a vacuum pump to siphon water into a plastic tube. This created a foamy water sample which made it impossible to remove bubbles from VOA vials. Consequently, volatile results may be substantially reduced.
DSA16 W	4-50ml vials 1-250 ml bottle	17'	Groundwater sample was collected using a vacuum pump to siphon water into a plastic tube. This created a foamy water sample which made it impossible to remove bubbles from VOA vials. Consequently, volatile results may be substantially reduced

TABLE 2
WATER SAMPLE ANALYTICAL RESULTS
CONSOLIDATED CONTAINER

CONCENTRATED CONTAINER			
		WATER SAMPLE	WATER SAMPLE
	Lab Method Blank	C2-W	DSA-16W
Parameter			
Metals mg/l			
Silver	<0.010	0.02	0.12
Arsenic	<0.020	0.054	0.05
Barium	<0.050	7.0	42
Cadmium	<0.010	0.032	1.0
Chromium	<0.050	0.94	4.6
Mercury	<0.0050	<0.0050	0.04
Lead	<0.050	0.76	39
Selenium	<0.020	<0.020	<0.020
DRO ug/l			
DRO	<70	630	13,000

Table 3
Soil Sampling Summary and Field Screening Results
Container Recycling, Inc. Property

SAMPLE #	# OF SAMPLE CONTAINERS	DEPTH OF BORING	DEPTH OF SAMPLE	PID READING	NOTES
DSA 1	2	0-4'	2-3'	< 1 ppm	Fill material
DSA 2	2	0-2'	1-2'	< 1 ppm	Fill material, refusal at 2'
DSA 3	2	0-4'	4'	3 ppm	Fill material
DSA 4	2	0-4'	4'	4 ppm	Fill material
DSA 6	2	0-3½'	2-3'	< 1 ppm	Fill material
DSA 7	2	0-3½'	2-3'	1 ppm	Fill material
DSA 8	2	0-3'	Surface	< 1 ppm	Fill material
DSA 9	2	0-4'	4'	5 ppm	Fill material
DSA 10	2	0-4'	2-3'	1 ppm	Fill material
DSA 11	2	0-4'	2-3'	1.5 ppm	Fill material
DSA 12	2	0-4'	1-2'	< 1 ppm	Fill material
DSA 13	2	0-4'	2-3'	< 1 ppm	Fill material
DSA 14	2	0-4'	3-4'	20 ppm	Fill material
DSA 15	4	0-20'	6'	40 ppm	Fill material, silty sand at 17.5'. Boring encountered several voids. PID readings of 5-10 ppm consistent throughout core sample
DSA 16	4	0-20'	unknown	4 ppm	Because of loose fill material and numerous voids an incomplete core sample was collected and can not be utilized to determine sample depth. Silty sand encountered at 17'
DSA 17	4	0-20'	unknown	7 ppm	Because of loose fill material and numerous voids an incomplete core sample was collected and can not be utilized to determine sample depth. Silty sand encountered at 17'

Table 3
Soil Sampling Summary and Field Screening Results
Container Recycling, Inc. Property

SAMPLE #	# OF SAMPLE CONTAINERS	DEPTH OF BORING	DEPTH OF SAMPLE	PID READING	NOTES
IS 1	2	0-4'	2'	<1	12" of concrete, 12" gravel, sand 2-4'
IS 2	2	0-4'	surface	10	12" of concrete, 12" gravel, sand 2-4'
IS 3	2	0-4'	surface	7	12" of concrete, 12" gravel, sand 2-4'
AST 1	4	0-20'	2-4'	< 1	Gravel extends down to 4', sand 4-20'
UST 1	4	0-20'	2'	2	Fill material down to 18.5', silty sand below. Perched groundwater encountered at 19.2' but not enough to collect water sample
FA 1	4	0-4'	2-3'	110	Concrete base, gravel 1-4', refusal at 4'
SA 1	4	0-20'	3'	1	Fill material down to 18', silty sand 18-20'
C 3	4	0-4'	2-3'	8	Gravel and fill mixture
C 4	4	0-4'	2-3'	5	Gravel and fill mixture
DSAM 1	1	--	surface	--	Surface sample near conveyor
DSAM 2	1	--	surface	--	Surface sample of soil with stressed vegetation near old drum storage area
DSAM 3	1	--	surface	--	Surface sample near dried paint chips

TABLE 4
SOIL SAMPLE ANALYTICAL RESULTS
CONSOLIDATED CONTAINER
DRUM STORAGE AREA

Parameter	Lab Method Blank	DSA -3	DSA -4	DSA -9	DSA -14	DSA -15	DSA -16	DSA -17	DSAM -2	DSAM -3	DSAM -1
Volatiles-(8260) mg/kg											
Dichlorodifluoromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Chloromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Vinyl Chloride	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Bromomethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Chloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Trichlorofluoromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Dichlorofluoromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Ethyl ether	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,1-Dichloroethene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,1,2-Trichlorotrifluoroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Acetone	0.51	<0.375	0.68	<0.375	<0.375	<0.375	<0.375	0.84b	--	--	--
Allyl chloride	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Methylene Chloride	<0.375	0.53b	0.43b	0.53b	0.54b	0.54b	0.55b	0.60b	--	--	--
1,2-Dichloroethane (total)	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Methyl tert-butyl ether	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,1-Dichloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
2,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
2-Butanone (MEK)	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Bromochloromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Tetrahydrofuran	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Chloroform	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,1,1-Trichloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Carbon tetrachloride	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,1-Dichloropropene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Benzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,2-Dichloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Trichloroethene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Dibromomethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Bromodichloromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
cis-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
4-Methyl-2-pentanone (MIBK)	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Toluene	<0.375	<0.375	0.64	<0.375	<0.375	66	<0.375	3.6	--	--	--
trans-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,1,2-Trichloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Tetrachloroethene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,3-Dichloropropane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Dibromochloromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Dibromoethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Chlorobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,1,1,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Ethyl benzene	<0.375	<0.375	4.6	<0.375	<0.375	54	<0.375	1.9	--	--	--
Xylenes (total)	<0.375	2.11	35	<0.375	<0.375	166	<0.375	10.1	--	--	--
Styrene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Bromoform	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Isopropyl benzene	<0.375	<0.375	0.90	<0.375	<0.375	1.3	<0.375	<0.375	--	--	--
Bromobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,1,2,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,2,3-Trichloropropene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
n-Propylbenzene	<0.375	<0.375	1.9	<0.375	<0.375	1.1	<0.375	<0.375	--	--	--
2-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
4-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,3,5-Trimethylbenzene	<0.375	<0.375	5.9	<0.375	<0.375	1.6	<0.375	0.54	--	--	--
tert-Butylbenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,2,4-Trimethylbenzene	<0.375	0.62	23	<0.375	<0.375	4.7	<0.375	1.3	--	--	--
sec-Butylbenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,3-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
4-Isopropyl toluene	<0.375	<0.375	0.67	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,4-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	0.40	<0.375	<0.375	--	--	--
1,2-Dichlorobenzene	<0.375	<0.375	0.57	<0.375	<0.375	2.2	<0.375	0.40	--	--	--
n-Butylbenzene	<0.375	0.97	2.7	<0.375	<0.375	0.77	<0.375	<0.375	--	--	--
1,2-Dibromo-3-chloropropane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
1,2,4-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Hexachlorobutadiene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--
Naphthalene	<0.375	4.3	6.3	<0.375	<0.375	5.2	<0.375	0.88	--	--	--
1,2,3-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375	--	--	--

-- = Analysis not requested

TABLE 4 (Cont'd)
SOIL SAMPLE ANALYTICAL RESULTS
CONSOLIDATED CONTAINER
DRUM STORAGE AREA

Parameter	Lab Method Blank	DSA -3	DSA -4	DSA -9	DSA -14	DSA -15	DSA -16	DSA -17	DSAM -2	DSAM -3	DSAM -1
Metals mg/kg											
Silver	<0.50	8.8	7.5	2.3	0.75	8.0	0.75	8.5	4.2	5.0	4.0
Arsenic	<1.0	14	13	4.8	3.1	47	1.9	14	30	19	<1.0
Barium	<1.0	760	360	160	75	300	65	320	1800	1800	140
Cadmium	<0.50	110	52	2.7	0.9	44	0.5	40	74	64	6.4
Chromium	<2.5	82	94	16	7.3	340	8.7	120	79	69	48
Mercury	<0.13	1.1	0.58	<0.13	<0.13	3.7	<0.13	1.1	2.1	0.45	<0.13
Lead	<2.5	3400	1400	440	35	7500	6.5	9200	3100	2300	310
Selenium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Diesel Range Organics mg/kg

DRO	<8.0	5100	7000	3000	200	8400	40	21000	--	--	--
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Polynuclear Aromatic Hydrocarbons mg/kg

Naphthalene	<0.33	3.3	<1.6	<1.6	<1.6	17	<0.33	<4.8	--	--	--
2-Methylnaphthalene	<0.33	3.3	<1.6	<1.6	<1.6	9.6	<0.33	<4.8	--	--	--
2-Chloronaphthalene	<0.33	<1.6	<1.6	<1.6	<1.6	<3.3	<0.33	<4.8	--	--	--
Acenaphthylene	<0.33	<1.6	<1.6	<1.6	<1.6	<3.3	<0.33	<4.8	--	--	--
Acenaphthene	<0.33	<1.6	<1.6	<1.6	<1.6	<3.3	<0.33	<4.8	--	--	--
Fluorene	<0.33	<1.6	<1.6	<1.6	<1.6	3.4	<0.33	<4.8	--	--	--
Phenanthrene	<0.33	<1.6	<1.6	<1.6	4.0	15	<0.33	<4.8	--	--	--
Anthracene	<0.33	<1.6	<1.6	<1.6	<1.6	<3.3	<0.33	<4.8	--	--	--
Fluoranthene	<0.33	<1.6	<1.6	1.7	3.9	7.0	<0.33	<4.8	--	--	--
Pyrene	<0.33	<1.6	<1.6	<1.6	3.0	9.7	<0.33	<4.8	--	--	--
Benzo(a)anthracene (c)	<0.33	<1.6	<1.6	<1.6	<1.6	<3.3	<0.33	<4.8	--	--	--
Chrysene (c)	<0.33	<1.6	<1.6	<1.6	<1.6	4	<0.33	<4.8	--	--	--
Benzo(b)fluoranthene (c)	<0.33	<1.6	<1.6	<1.6	<1.6	8.3	<0.33	<4.8	--	--	--
Benzo(k)fluoranthene (c)	<0.33	<1.6	<1.6	<1.6	<1.6	<3.3	<0.33	<4.8	--	--	--
Benzo(a)pyrene (c)	<0.33	<1.6	<1.6	<1.6	<1.6	<3.3	<0.33	<4.8	--	--	--
Indeno (1,2,3-cd)pyrene	<0.33	<1.6	<1.6	<1.6	<1.6	<3.3	<0.33	<4.8	--	--	--
Dibenz(a,h)anthracene (c)	<0.33	<1.6	<1.6	<1.6	<1.6	<3.3	<0.33	<4.8	--	--	--
Benzo(g,h,i)perylene	<0.33	<1.6	<1.6	<1.6	<1.6	<3.3	<0.33	<4.8	--	--	--

Polychlorinated Biphenyls mg/kg

Aroclor 1016	<1.0	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	<1.0	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	<1.0	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	<0.10	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	<0.10	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	<0.10	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	<0.10	--	--	--	--	--	--	--	--	--	--

-- = Analysis not requested

TABLE 5
SOIL SAMPLE ANALYTICAL RESULTS
CONSOLIDATED CONTAINER
DRUM PROCESSING AREA

Parameter	C3	C4	UST1	FA-1	AST-1	SA-1
Volatiles-(B260) mg/kg						
Dichlorodifluoromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Chloromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Vinyl Chloride	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Bromomethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Chloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Trichlorofluoromethane	<0.375	<0.375	<0.375	<0.375	<0.375	0.51
Dichlorofluoromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Ethyl ether	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,1-Dichloroethene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,1,2-Trichlorotrifluoroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Acetone	<0.375	<0.375	0.84	<0.375	<0.375	0.88b
Allyl chloride	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Methylene Chloride	1.2b	0.45b	0.67b	0.59b	0.76b	<0.375
1,2-Dichloroethane (total)	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Methyl tert-butyl ether	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,1-Dichloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
2,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
2-Butanone (MEK)	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Bromochloromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Tetrahydrofuran	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Chloroform	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,1,1-Trichloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Carbon tetrachloride	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,1-Dichloropropene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Benzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,2-Dichloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Trichloroethene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Dibromomethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Bromodichloromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
cis-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
4-Methyl-2-pentanone (MIBK)	5.6	<0.375	<0.375	<0.375	<0.375	1.0
Toluene	3.4	<0.375	<0.375	0.86	<0.375	0.98
trans-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,1,2-Trichloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Tetrachloroethene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,3-Dichloropropane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Dibromochloromethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Dibromoethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Chlorobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,1,1,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Ethyl benzene	<0.375	<0.375	<0.375	2.1	<0.375	0.52
Xylenes (total)	0.46	0.96	<0.375	18.4	<0.375	2.57
Styrene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Bromoform	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Isopropyl benzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Bromobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,1,2,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,2,3-Trichloropropene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
n-Propylbenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
2-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
4-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,3,5-Trimethylbenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
tert-Butylbenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,2,4-Trimethylbenzene	0.45	<0.375	<0.375	0.78	<0.375	<0.375
sec-Butylbenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,3-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
4-Isopropyl toluene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,4-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,2-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
n-Butylbenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,2-Dibromo-3-chloropropane	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
1,2,4-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Hexachlorobutadiene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Naphthalene	0.44	<0.375	<0.375	<0.375	<0.375	<0.375
1,2,3-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375

TABLE 5 (Cont'd)
SOIL SAMPLE ANALYTICAL RESULTS
CONSOLIDATED CONTAINER
DRUM PROCESSING AREA

Parameter	C3	C4	UST1	FA-1	AST-1	SA-1
Metals mg/kg						
Silver	9.3	8.8	8.5	0.75	2.5	7.8
Arsenic	17	9.3	24	3.1	3.9	17
Barium	880	990	530	95	120	1400
Cadmium	73	44	87	1.2	3.1	69
Chromium	89	81	93	25	8.0	91
Mercury	<0.13	2.6	0.63	<0.13	<0.13	2.0
Lead	4000	2800	3500	80	450	3000
Selenium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Diesel Range Organics mg/kg						
DRO	4700	3200	6500	2200	3300	4400

Polynuclear Aromatic Hydrocarbons mg/kg						
Naphthalene	3.5	<1.6	<1.6	<3.3	<3.3	<3.3
2-Methylnaphthalene	7.8	<1.6	<1.6	<3.3	<3.3	<3.3
2-Chloronaphthalene	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Acenaphthylene	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Acenaphthene	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Fluorene	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Phenanthrene	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Anthracene	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Fluoranthene	1.9	<1.6	<1.6	<3.3	<3.3	<3.3
Pyrene	2.4	<1.6	<1.6	<3.3	<3.3	<3.3
Benzo(a)anthracene (c)	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Chrysene (c)	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Benzo(b)fluoranthene (c)	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Benzo(k)fluoranthene (c)	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Benzo(a)pyrene (c)	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Indeno (1,2,3-cd)pyrene	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Dibenz(a,h)anthracene (c)	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3
Benzo(g,h,i)perylene	<1.6	<1.6	<1.6	<3.3	<3.3	<3.3

Polychlorinated Biphenyls mg/kg						
Aroclor 1016	<1.0	--	--	--	--	--
Aroclor 1221	<1.0	--	--	--	--	--
Aroclor 1232	<1.0	--	--	--	--	--
Aroclor 1242	<0.10	--	--	--	--	--
Aroclor 1248	<0.10	--	--	--	--	--
Aroclor 1254	8.3	--	--	--	--	--
Aroclor 1260	<0.10	--	--	--	--	--

-- = Analysis not requested

TABLE 6
SOIL SAMPLE ANALYTICAL RESULTS
CONSOLIDATED CONTAINER
INSIDE BUILDING AREA

Parameter	IS-2	IS-3
Volatiles-(8260) mg/kg		
Dichlorodifluoromethane	<0.375	<0.375
Chloromethane	<0.375	<0.375
Vinyl Chloride	<0.375	<0.375
Bromomethane	<0.375	<0.375
Chloroethane	<0.375	<0.375
Trichlorofluoromethane	<0.375	<0.375
Dichlorofluoromethane	<0.375	<0.375
Ethyl ether	<0.375	<0.375
1,1-Dichloroethene	<0.375	<0.375
1,1,2-Trichlorotrifluoroethane	<0.375	<0.375
Acetone	<0.375	<0.375
Allyl chloride	<0.375	<0.375
Methylene Chloride	<0.375	0.58b
1,2-Dichloroethene (total)	<0.375	<0.375
Methyl tert-butyl ether	<0.375	<0.375
1,1-Dichloroethane	<0.375	<0.375
2,2-Dichloropropane	<0.375	<0.375
2-Butanone (MEK)	<0.375	<0.375
Bromochloromethane	<0.375	<0.375
Tetrahydrofuran	<0.375	<0.375
Chloroform	<0.375	<0.375
1,1,1-Trichloroethane	<0.375	<0.375
Carbon tetrachloride	<0.375	<0.375
1,1-Dichloropropene	<0.375	<0.375
Benzene	<0.375	<0.375
1,2-Dichloroethane	<0.375	<0.375
Trichloroethene	<0.375	<0.375
1,2-Dichloropropane	<0.375	<0.375
Dibromomethane	<0.375	<0.375
Bromodichloromethane	<0.375	<0.375
cis-1,3-Dichloropropene	<0.375	<0.375
4-Methyl-2-pentanone (MIBK)	<0.375	<0.375
Toluene	<0.375	<0.375
trans-1,3-Dichloropropene	<0.375	<0.375
1,1,2-Trichloroethane	<0.375	<0.375
Tetrachloroethene	0.89	<0.375
1,3-Dichloropropane	<0.375	<0.375
Dibromochloromethane	<0.375	<0.375
Dibromoethane	<0.375	<0.375
Chlorobenzene	<0.375	<0.375
1,1,1,2-Tetrachloroethane	<0.375	<0.375
Ethyl benzene	<0.375	<0.375
Xylenes (total)	<0.375	<0.375
Styrene	<0.375	<0.375
Bromoform	<0.375	<0.375
Isopropyl benzene	<0.375	<0.375
Bromobenzene	<0.375	<0.375
1,1,2,2-Tetrachloroethane	<0.375	<0.375
1,2,3-Trichloropropene	<0.375	<0.375
n-Propylbenzene	<0.375	<0.375
2-Chlorotoluene	<0.375	<0.375
4-Chlorotoluene	<0.375	<0.375
1,3,5-Trimethylbenzene	<0.375	<0.375
tert-Butylbenzene	<0.375	<0.375
1,2,4-Trimethylbenzene	<0.375	<0.375
sec-Butylbenzene	<0.375	<0.375
1,3-Dichlorobenzene	<0.375	<0.375
4-Isopropyl toluene	<0.375	<0.375
1,4-Dichlorobenzene	<0.375	<0.375
1,2-Dichlorobenzene	<0.375	<0.375
n-Butylbenzene	<0.375	<0.375
1,2-Dibromo-3-chloropropane	<0.375	<0.375
1,2,4-Trichlorobenzene	<0.375	<0.375
Hexachlorobutadiene	<0.375	<0.375
Naphthalene	<0.375	<0.375
1,2,3-Trichlorobenzene	<0.375	<0.375

TABLE 6 (Cont'd)
SOIL SAMPLE ANALYTICAL RESULTS
CONSOLIDATED CONTAINER
INSIDE BUILDING AREA

Parameter	IS-2	IS-3
Metals mg/kg		
Silver	<0.50	0.75
Arsenic	2.9	<1.0
Barium	70	61
Cadmium	<0.50	<0.50
Chromium	8.1	6.9
Mercury	<0.13	<0.13
Lead	3.8	4.5
Selenium	<1.0	<1.0

Diesel Range Organics mg/kg

DRO	NA	NA
-----	----	----

**Polynuclear Aromatic Hydrocarbons
mg/kg**

Naphthalene	--	--
2-Methylnaphthalene	--	--
2-Chloronaphthalene	--	--
Acenaphthylene	--	--
Acenaphthene	--	--
Fluorene	--	--
Phenanthrene	--	--
Anthracene	--	--
Fluoranthene	--	--
Pyrene	--	--
Benzo(a)anthracene (c)	--	--
Chrysene (c)	--	--
Benzo(b)fluoranthene (c)	--	--
Benzo(k)fluoranthene (c)	--	--
Benzo(a)pyrene (c)	--	--
Indeno (1,2,3-cd)pyrene	--	--
Dibenz(a,h)anthracene (c)	--	--
Benzo(g,h,i)perylene	--	--

Polychlorinated Biphenyls mg/kg

Aroclor 1018	--	--
Aroclor 1221	--	--
Aroclor 1232	--	--
Aroclor 1242	--	--
Aroclor 1248	--	--
Aroclor 1254	--	--
Aroclor 1260	--	--

-- = Analysis not requested

Figures

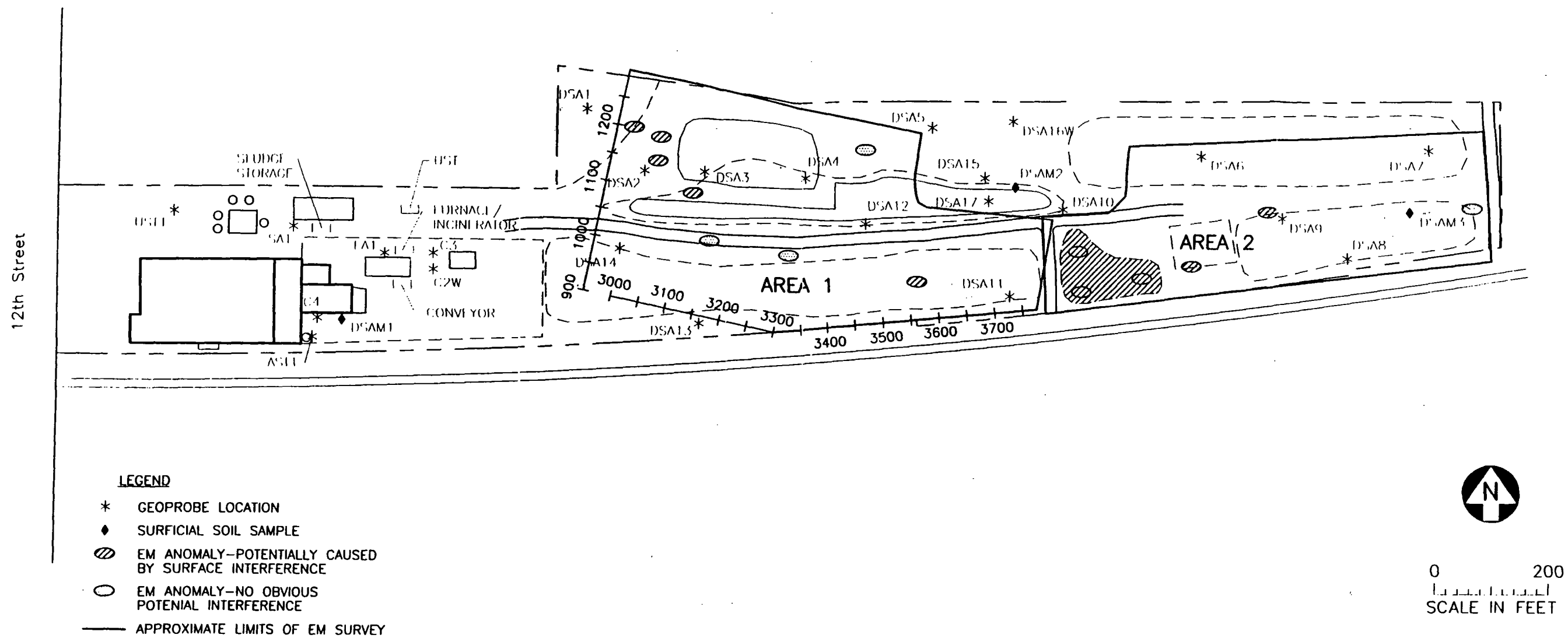


Figure 4

EM SURVEY LAYOUT AND RESULTS



0 300 600
SCALE IN FEET

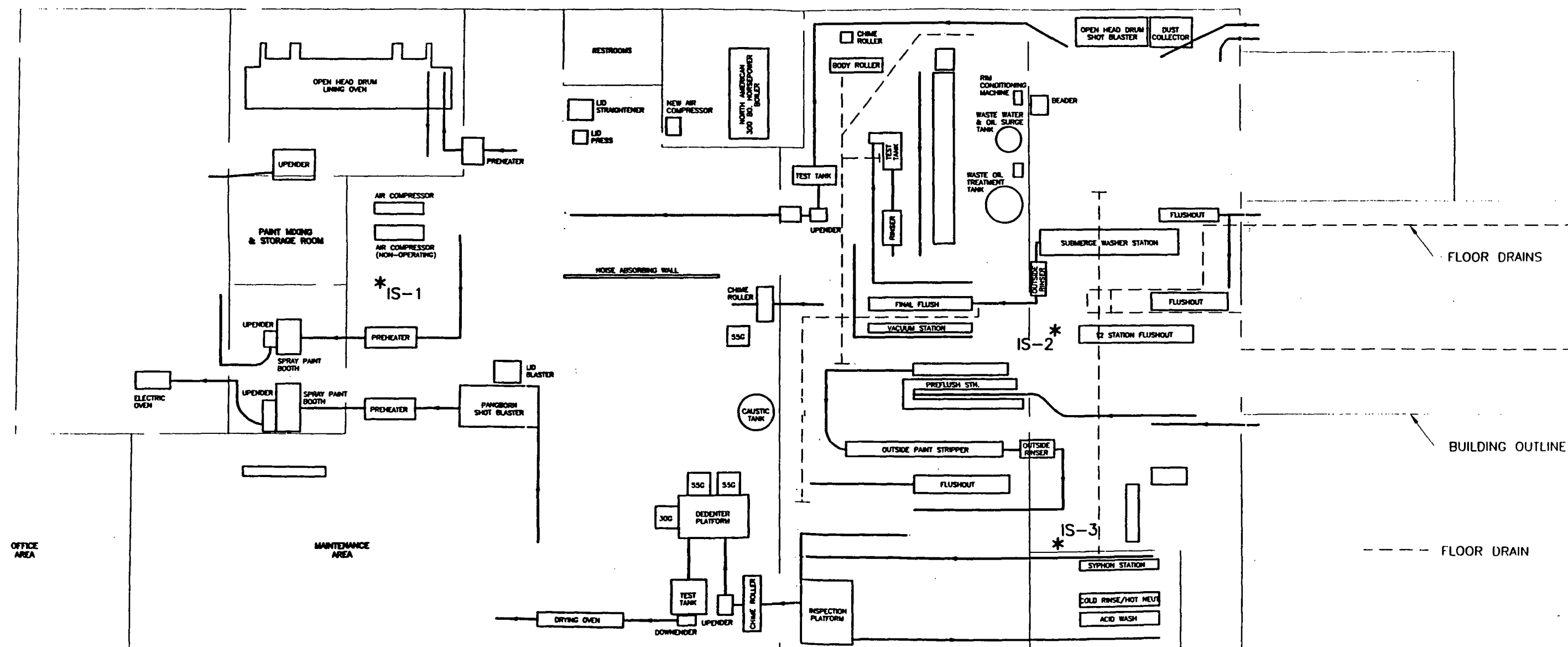
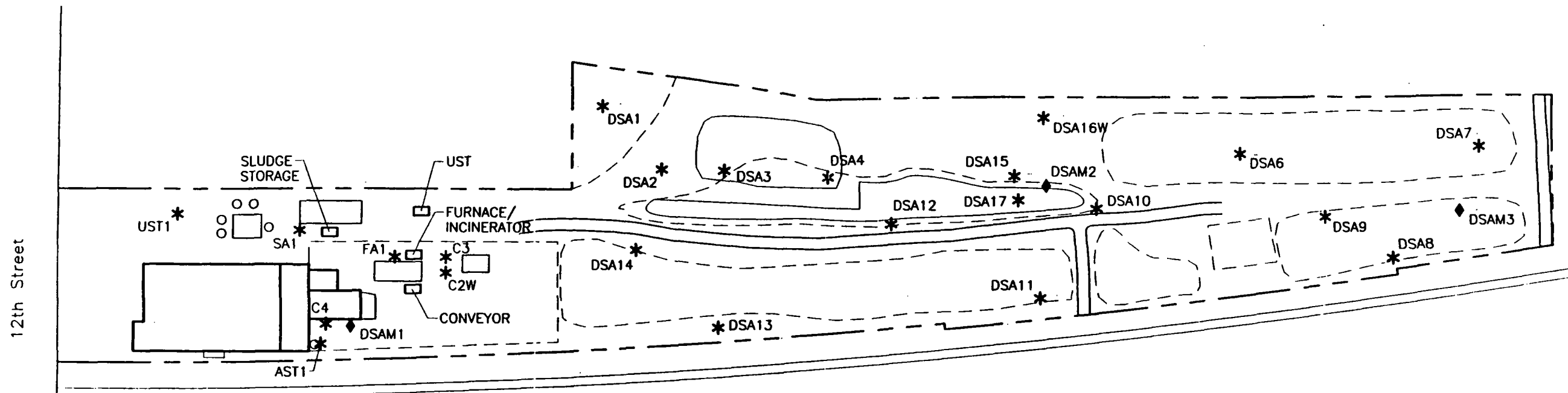


Figure 3
SOIL BORING LOCATIONS AND
BUILDING INTERIOR



LEGEND

- * BORING LOCATION
- ◆ SURFICIAL SOIL SAMPLE

NOTE:
WATER SMPLES COLLECTED AT
LOCATIONS LABELED WITH A "W".



0 200
SCALE IN FEET

Figure 2
SOIL BORING LOCATIONS AND
BUILDING EXTERIOR

Appendices

Appendix A

775 Vandalia Street, St. Paul, MN 55114 - Telephone: 612/642-1150 Fax: 612/642-1239

CHAIN-OF-CUSTODY RECORD

Item No.	Field ID No.	Sample Description	Collection		Sample Matrix	Lab ID No.								
			Date	Time										
1	DSA 1	2 - 202 jars	2-17		Soil	97-73115								
2	DSA 2	2 - 202 jars	2-17		Soil	97-73116								
3	DSA 3	2 - 202 jars	2-17		Soil	97-73117		✓	✓	✓	✓			
4	DSA 4	2 - 202 jars	2-17		Soil	97-73118		✓	✓	✓	✓			
5	DSA 6	2 - 202 jars	2-17		Soil	97-73119								
6	DSA 7	2 - 202 jars	2-17		Soil	97-73120								
7	DSA 8	2 - 202 jars	2-17		Soil	97-73121								
8	DSA 9	2 - 202 jars	2-17		Soil	97-73122		✓	✓	✓	✓			
9	DSA 10	2 - 202 jars	2-17		Soil	97-73123								
10	DSA 11	2 - 202 jars	2-17		Soil	97-73124								
11	DSA 12	2 - 202 jars	2-17		Soil	97-73125								
12	DSA 13	2 - 202 jars	2-17		Soil	97-73126								
13	DSA 14	2 - 202 jars	2-17		Soil	97-73127		✓	✓	✓	✓			

Transfer No.	Item No.	Relinquished By	Accepted By	Date	Time	Comments
1			Theresa Sass	7/20/97	10am	Red onull
2						
3						
4						

775 Vandalia Street, St. Paul, MN 55114 - Telephone: 612/642-1150 Fax: 612/642-1239

CHAIN-OF-CUSTODY RECORD

Client Name: <u>Parr Engineering</u> <u>p 2</u>	Laboratory Project No.: <u>97-0458</u>	Analysis/# of Containers:						
Report To:	Turnaround Time:	P I D F I E L D	R E A D I N G S	P A H	V O C	D R O	P C P A	P C B
Attn:	<input type="checkbox"/> Normal Date Needed: _____							
Sampled By:	<input type="checkbox"/> Rush Date Needed: _____							
Project No.:	Condition Received: <input type="checkbox"/> Received on Ice							

Item No.	Field ID No.	Sample Description	Collection		Sample Matrix	Lab ID No.							
			Date	Time									
18x	DSA15	1 jars	2-18		Soil	97-73128		✓	✓	✓	✓		
15z	ISA16	4 jars	2-18		Soil	97-73129		✓	✓	✓	✓		
16x	DSA17	4 jars	2-18		Soil	97-73130		✓	✓	✓	✓		
17A	IS1	2 jars	2-18		Soil	97-73131							
18A	IS2	2 jars	2-17		Soil	97-73132			✓		✓		
19A	IS3	2 jars	2-17		Soil	97-73133			✓		✓		
20A	C2W	4 vials, 1-250ml bottle	2-17		Water	97-73134	no → X			✓	✓		
21B	C3	4 jars	2-18		Soil	97-73135		✓	✓	✓	✓	✓	
22A	C4	4 jars	2-18		Soil	97-73136		✓	✓	✓	✓		
23M	AST1	4 jars	2-18		Soil	97-73137		✓	✓	✓	✓		
24X	FA1	4 jars	2-18		Soil	97-73138		✓	✓	✓	✓		
25x	AST1	4 jars	2-18		Soil	97-73139		✓	✓	✓	✓		
26X	DSAM1	1 jar	2-18		Soil	97-73140							

Transfer No.	Item No.	Relinquished By	Accepted By	Date	Time	Comments
1			Theresa Sess	2/20/92	10am	Rec'd on ice.
2						* Per Grant Paul, no PATH.
3						
4						

LEGEND TECHNICAL SERVICES, INC.

775 Vandalia Street, St. Paul, MN 55114 - Telephone: 612/642-1150 Fax: 612/642-1239

CHAIN-OF-CUSTODY RECORD

Client Name: <u>Barr Engineering #3</u>	Laboratory Project No.: <u>97-0458</u>	Analysis/# of Containers:
Report To:	Turnaround Time:	P R E A D I N G S F I E L D PAH VOC DRO PCRA PCB
Attn:	<input type="checkbox"/> Normal Date Needed: _____ <input type="checkbox"/> Rush Date Needed: _____	
Sampled By:	Condition Received:	
Project No.:	<input type="checkbox"/> Received on Ice	

Item No.	Field ID No.	Sample Description	Collection		Sample Matrix	Lab ID No.								
			Date	Time										
27x	DS4M2	1 jar	2-18		Soil	97-73141								
28x	DS4M3	1 jar	2-18		Soil	97-73142								
29x	SA1	4 jars	2-18		Soil	97-73143		✓	✓	✓	✓			
30x	DS4M4	4 vials 1 250ml bottle	2-18		Water	97-73144	no →	X		✓	✓		*	
5		Trip Blank				97-73185				↑ yes				
6														
7														
8														
9														
10														
11														
12														
13														

Transfer No.	Item No.	Relinquished By	Accepted By	Date	Time	Comments
1	1-30	David Epner	Theresa Sass	2/20/97	10:08am	Rec'd on ice
2						* 2/20/97 - Per Grant Paul
3						no PAH on 73144, but would
4						like DRO and metals.

Appendix B



March 7, 1997

MAR 13 1997

Mr. Grant Paul
Barr Engineering Co.
8300 Norman Center Drive
Minneapolis, MN 55437

SUBJECT: 1699001TJT001 Consolidated Container
LEGEND No. 97-0458

1.0 INTRODUCTION

LEGEND TECHNICAL SERVICES, INC. (LEGEND) received 28 soil and two water samples from a representative of Barr Engineering Co. on February 20, 1997. The parameters and analytical results are listed in the attached tables.

2.0 SAMPLE IDENTIFICATION

See Table #1

3.0 METHODOLOGY

Diesel Range Organics

The samples were prepared and analyzed using methods based on the Wisconsin Department of Natural Resources Method, PUBL-SW-141, for Modified DRO.

Volatile Organic Compounds (GC/MS)

The samples were prepared and analyzed with methods based on EPA SW-846, Method 8260.

Polynuclear Aromatic Hydrocarbons (GC/MS)

The samples were prepared and analyzed using methods based on EPA SW-846, Method 8270.

Metals

The samples were prepared and analyzed with methods based on EPA methods.

Polychlorinated Biphenyls

The sample was prepared and analyzed with methods based on EPA SW-846, Method 8081.

4.0 CASE NARRATIVE

The samples were taken on February 17 and 18, 1997, and were received on ice in acceptable condition.

The VOC samples were prepared and analyzed using methanol extraction techniques due to surrogate losses using low level analysis techniques.

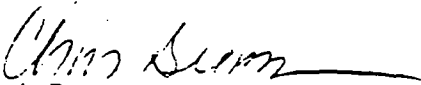
The DRO water MS recovery exceeded limits. The sample surrogate recoveries were within control, therefore the samples were not re-analyzed

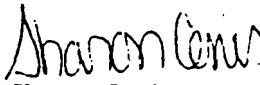
5.0 REMARKS

The unconsumed samples will be retained by our laboratory for 30 days from the date of this report and then discarded unless other instructions are received by the client.

Submitted by,

LEGEND TECHNICAL SERVICES, INC.


Chris Bremer
Laboratory Manager


Sharon Cenis
Chemist

CB/SC/sec

LEGEND TECHNICAL SERVICES, INC.

TABLE #1

LEGEND No. 97-0458

BARR ENGINEERING CO.

SAMPLE IDENTIFICATION

LABORATORY No.	CLIENT IDENTIFICATION
SN97-73115	DSA 1 (HOLD)
SN97-73116	DSA 2 (HOLD)
SN97-73117	DSA 3
SN97-73118	DSA 4
SN97-73119	DSA 6 (HOLD)
SN97-73120	DSA 7 (HOLD)
SN97-73121	DSA 8 (HOLD)
SN97-73122	DSA 9
SN97-73123	DSA 10 (HOLD)
SN97-73124	DSA 11 (HOLD)
SN97-73125	DSA 12 (HOLD)
SN97-73126	DSA 13 (HOLD)
SN97-73127	DSA 14
SN97-73128	DSA 15
SN97-73129	DSA 16
SN97-73130	DSA 17
SN97-73131	IS 1 (HOLD)
SN97-73132	IS 2
SN97-73133	IS 3
SN97-73134	C2 W Water
SN97-73135	C3

LEGEND TECHNICAL SERVICES, INC.

TABLE #1 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

SAMPLE IDENTIFICATION

LABORATORY No.	CLIENT IDENTIFICATION
SN97-73136	C4
SN97-73137	UST 1
SN97-73138	FA 1
SN97-73139	AST 1
SN97-73140	DSAM1
SN97-73141	DSAM2
SN97-73142	DSAM3
SN97-73143	SA 1
SN97-73144	DSA16 W Water
SN97-73185	Trip Blank

LEGEND TECHNICAL SERVICES, INC.

TABLE #2
LEGEND No. 97-0458

BARR ENGINEERING CO.

DIESEL RANGE ORGANICS - SOIL

Sample ID	Diesel Range Organics (mg/kg)	Date Extracted	Date Analyzed
DSA 3	5,100 ^A	2/27/97	2/28/97, 3/01/97
DSA 4	7,000 ^B	2/27/97	2/28/97, 3/01/97
DSA 9	3,000 ^B	2/27/97	2/28/97, 3/01/97
DSA 14	200 ^B	2/27/97	2/28/97, 3/04/97
DSA 15	8,400 ^A	2/27/97	2/28/97, 3/01/97
DSA 16	40	2/27/97 ^C	2/28/97
DSA 17	21,000 ^B	2/27/97	2/28/97, 3/01/97
C3	4,700 ^A	2/27/97	2/28/97, 3/01/97
C4	3,200 ^A	2/27/97	2/28/97, 3/01/97
UST 1	6,500 ^B	2/27/97	2/28/97, 3/01/97
FA 1	2,200 ^C	2/27/97	2/28/97
AST 1	3,300 ^A	2/27/97	2/28/97, 3/01/97
SA 1	4,400 ^B	2/27/97	2/28/97, 3/01/97
Method Blank	<8.0	2/27/97	2/27/97
Practical quantitation limit	8.0	----	----
Recovery Data	Percent Recovery		
Spike #1	115	2/27/97	2/27/97
Spike #2	114		

< = Less than number shown

mg/kg is equal to parts-per-million (dry weight basis)

A Chromatographic profile indicated the presence of two petroleum fractions present.

B The chromatographic profile indicates the presence of compounds in the boiling range of non-distillate petroleum products or lubricating oils.

C The sample contains compounds more volatile than DRO.

LEGEND TECHNICAL SERVICES, INC.

TABLE #3

LEGEND No. 97-0458

BARR ENGINEERING CO.

DIESEL RANGE ORGANICS - WATER

Sample ID	Diesel Range Organics ($\mu\text{g/L}$)	Date Extracted	Date Analyzed
C2 W	630 **	2/24/97	2/27/97
DSA16	13,000 **	2/24/97	2/26/97, 3/01/97
Method Blank	< 70	2/24/97	2/26/97
Practical quantitation limit	70	----	----
Recovery Data	Percent Recovery		
Spike #1	121 *	2/24/97	2/26/97
Spike #2	112		

< = Less than number shown

 $\mu\text{g/L}$ is equivalent to parts-per-billion

* The matrix spike recovery was higher than the recovery limit (115%). The sample surrogate recoveries were within limits and the next QC recovery was within control. Therefore the sample was not re-analyzed.

** Sample extraction volume was 160 mL.

LEGEND TECHNICAL SERVICES, INC.

TABLE #4

LEGEND No. 97-0458
BARR ENGINEERING CO.

POLYNUCLEAR AROMATIC HYDROCARBONS -GC/MS

Compound	DSA 3 * (mg/kg)	DSA 4 * (mg/kg)	DSA 9 * (mg/kg)	DSA 14 * (mg/kg)	PQL (mg/kg)
Naphthalene	3.3	<1.6	<1.6	<1.6	0.33
2-Methylnaphthalene	3.3	<1.6	<1.6	<1.6	0.33
2-Chloronaphthalene	<1.6	<1.6	<1.6	<1.6	0.33
Acenaphthylene	<1.6	<1.6	<1.6	<1.6	0.33
Acenaphthene	<1.6	<1.6	<1.6	<1.6	0.33
Fluorene	<1.6	<1.6	<1.6	<1.6	0.33
Phenanthrene	<1.6	<1.6	<1.6	4.0	0.33
Anthracene	<1.6	<1.6	<1.6	<1.6	0.33
Fluoranthene	<1.6	<1.6	1.7	3.9	0.33
Pyrene	<1.6	<1.6	<1.6	3.0	0.33
Benzo(a)anthracene	<1.6	<1.6	<1.6	<1.6	0.33
Chrysene	<1.6	<1.6	<1.6	<1.6	0.33
Benzo(b)fluoranthene	<1.6	<1.6	<1.6	<1.6	0.33
Benzo(k)fluoranthene	<1.6	<1.6	<1.6	<1.6	0.33
Benzo(a)pyrene	<1.6	<1.6	<1.6	<1.6	0.33
Indeno(1,2,3-cd)pyrene	<1.6	<1.6	<1.6	<1.6	0.33
Dibenz(a,h)anthracene	<1.6	<1.6	<1.6	<1.6	0.33
Benzo(g,h,i)perylene	<1.6	<1.6	<1.6	<1.6	0.33
Semi-Volatile Surrogates (Percent Recovery)					Limits
Nitrobenzene-d5	86.8	92.1	76.8	92.8	23-120
2-Fluorobiphenyl	63.2	55.0	48.3	55.7	30-115
Terphenyl-d14	86.9	67.7	87.7	104	18-137
DATE EXTRACTED:	2/27/97	2/27/97	2/27/97	2/27/97	----
DATE ANALYZED:	2/27/97	2/27/97	2/27/97	2/27/97	----

mg/kg is equal to parts-per-million (wet weight basis)

< = Less than the number shown

PQL = Practical quantitation limit

* PQL's were elevated due to matrix interferences.

LEGEND TECHNICAL SERVICES, INC.

TABLE #4 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

POLYNUCLEAR AROMATIC HYDROCARBONS -GC/MS

Compound	C 4 *	UST 1 *	FA 1 *	AST 1 *	PQL
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Naphthalene	<1.6	<1.6	<3.3	<3.3	0.33
2-Methylnaphthalene	<1.6	<1.6	<3.3	<3.3	0.33
2-Chloronaphthalene	<1.6	<1.6	<3.3	<3.3	0.33
Acenaphthylene	<1.6	<1.6	<3.3	<3.3	0.33
Acenaphthene	<1.6	<1.6	<3.3	<3.3	0.33
Fluorene	<1.6	<1.6	<3.3	<3.3	0.33
Phenanthrene	<1.6	<1.6	<3.3	<3.3	0.33
Anthracene	<1.6	<1.6	<3.3	<3.3	0.33
Fluoranthene	<1.6	<1.6	<3.3	<3.3	0.33
Pyrene	<1.6	<1.6	<3.3	<3.3	0.33
Benzo(a)anthracene	<1.6	<1.6	<3.3	<3.3	0.33
Chrysene	<1.6	<1.6	<3.3	<3.3	0.33
Benzo(b)fluoranthene	<1.6	<1.6	<3.3	<3.3	0.33
Benzo(k)fluoranthene	<1.6	<1.6	<3.3	<3.3	0.33
Benzo(a)pyrene	<1.6	<1.6	<3.3	<3.3	0.33
Indeno(1,2,3-cd)pyrene	<1.6	<1.6	<3.3	<3.3	0.33
Dibenz(a,h)anthracene	<1.6	<1.6	<3.3	<3.3	0.33
Benzo(g,h,i)perylene	<1.6	<1.6	<3.3	<3.3	0.33
Semi-Volatile Surrogates (Percent Recovery)					Limits
Nitrobenzene-d5	90.2	60.7	12.1 **	98.0	23-120
2-Fluorobiphenyl	42.4	11.8 **	**	**	30-115
Terphenyl-d14	133	74.9	124	152 **	18-137
DATE EXTRACTED:	2/27/97	2/27/97	2/27/97	2/27/97	----
DATE ANALYZED:	2/27/97	2/28/97	3/03/97	3/03/97	----

mg/kg is equal to parts-per-million (wet weight basis) < = Less than the number shown

* PQL's were elevated due to matrix interferences PQL = Practical quantitation limit

** Surrogate outside of recovery limits due to matrix interferences.

LEGEND TECHNICAL SERVICES, INC.

TABLE #4 (continued)
LEGEND No. 97-0458
BARR ENGINEERING CO.

POLYNUCLEAR AROMATIC HYDROCARBONS -GC/MS

Compound	DSA 15 * (mg/kg)	DSA 16 (mg/kg)	DSA 17 (mg/kg)	C3 * (mg/kg)	PQL (mg/kg)
Naphthalene	17	<0.33	<4.8	3.5	0.33
2-Methylnaphthalene	9.6	<0.33	<4.8	7.8	0.33
2-Chloronaphthalene	<3.3	<0.33	<4.8	<1.6	0.33
Acenaphthylene	<3.3	<0.33	<4.8	<1.6	0.33
Acenaphthene	<3.3	<0.33	<4.8	<1.6	0.33
Fluorene	3.4	<0.33	<4.8	<1.6	0.33
Phenanthrene	15	<0.33	<4.8	<1.6	0.33
Anthracene	<3.3	<0.33	<4.8	<1.6	0.33
Fluoranthene	7.0	<0.33	<4.8	1.9	0.33
Pyrene	9.7	<0.33	<4.8	2.4	0.33
Benzo(a)anthracene	<3.3	<0.33	<4.8	<1.6	0.33
Chrysene	4.4	<0.33	<4.8	<1.6	0.33
Benzo(b)fluoranthene	8.3	<0.33	<4.8	<1.6	0.33
Benzo(k)fluoranthene	***	<0.33	<4.8	<1.6	0.33
Benzo(a)pyrene	<3.3	<0.33	<4.8	<1.6	0.33
Indeno(1,2,3-cd)pyrene	<3.3	<0.33	<4.8	<1.6	0.33
Dibenz(a,h)anthracene	<3.3	<0.33	<4.8	<1.6	0.33
Benzo(g,h,i)perylene	<3.3	<0.33	<4.8	<1.6	0.33
Semi-Volatile Surrogates (Percent Recovery)					Limits
Nitrobenzene-d5	**	73.2	39.2	64.9	23-120
2-Fluorobiphenyl	**	78.5	**	22.4 **	30-115
Terphenyl-d14	**	92.4	50.4	82.3	18-137
DATE EXTRACTED:	2/27/97	2/27/97	2/27/97	2/27/97	----
DATE ANALYZED:	3/05/97	2/27/97	2/27/97	2/27/97	----

mg/kg is equal to parts-per-million (wet weight basis)

< = Less than the number shown PQL = Practical quantitation limit.

* PQL's were elevated due to matrix interferences.

** Surrogates outside recover limits due to matrix interferences.

*** The concentration of Benzo(b)fluoranthene is a total of both benzo(b) and benzo(k)fluoranthene.

LEGEND TECHNICAL SERVICES, INC.

TABLE #4 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

POLYNUCLEAR AROMATIC HYDROCARBONS -GC/MS

Compound	SA 1 * (mg/kg)	Method Blank (mg/kg)	PQL (mg/kg)
Naphthalene	<3.3	<0.33	0.33
2-Methylnaphthalene	<3.3	<0.33	0.33
2-Chloronaphthalene	<3.3	<0.33	0.33
Acenaphthylene	<3.3	<0.33	0.33
Acenaphthene	<3.3	<0.33	0.33
Fluorene	<3.3	<0.33	0.33
Phenanthrene	<3.3	<0.33	0.33
Anthracene	<3.3	<0.33	0.33
Fluoranthene	<3.3	<0.33	0.33
Pyrene	<3.3	<0.33	0.33
Benzo(a)anthracene	<3.3	<0.33	0.33
Chrysene	<3.3	<0.33	0.33
Benzo(b)fluoranthene	<3.3	<0.33	0.33
Benzo(k)fluoranthene	<3.3	<0.33	0.33
Benzo(a)pyrene	<3.3	<0.33	0.33
Indeno(1,2,3-cd)pyrene	<3.3	<0.33	0.33
Dibenz(a,h)anthracene	<3.3	<0.33	0.33
Benzo(g,h,i)perylene	<3.3	<0.33	0.33
Semi-Volatile Surrogates (Percent Recovery)			Limits
Nitrobenzene-d5	133 **	79.5	23-120
2-Fluorobiphenyl	40.3	85.3	30-115
Terphenyl-d14	114	68.9	18-137
DATE EXTRACTED:	2/27/97	2/27/97	----
DATE ANALYZED:	3/03/97	2/27/97	----

mg/kg is equal to parts-per-million (wet weight basis)

< = Less than the number shown

* PQL's were elevated due to matrix interferences. PQL = Practical quantitation limit

** Surrogates outside recovery limits due to matrix interferences.

LEGEND TECHNICAL SERVICES, INC.

TABLE #5
LEGEND No. 97-0458

BARR ENGINEERING CO.

POLYCHLORINATED BIPHENYLS

Compound	C-3 (mg/kg)	Method Blank (mg/kg)	PQL (mg/kg)
Aroclor 1016	<1.0	<1.0	1.0
Aroclor 1221	<1.0	<1.0	1.0
Aroclor 1232	<1.0	<1.0	1.0
Aroclor 1242	<0.10	<0.10	0.10
Aroclor 1248	<0.10	<0.10	0.10
Aroclor 1254	8.3	<0.10	0.10
Aroclor 1260	<0.10	<0.10	0.10
Surrogate recoveries (percent)			Limits
2,4,5,6-Tetrachloro-m-xylene	*	70.4	60-150
Decachlorobiphenyl	*	77.3	60-150
Recovery Data			Percent
Spike #1			51.4
Spike #2			92.9
DATE EXTRACTED:	2/28/97	2/28/97	----
DATE ANALYZED:	2/28/97	2/28/97	----

< = Less than number shown

PQL = Practical quantitation limit

mg/kg is equal to parts-per-million

* Surrogates were diluted out due to matrix interferences.

LEGEND TECHNICAL SERVICES, INC.TABLE #56
LEGEND No. 97-0458BARR ENGINEERING CO.
METHOD 8260/465D
VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	DSA 3 (mg/kg)	DSA 4 (mg/kg)	DSA 9 (mg/kg)	DSA 14 (mg/kg)	PQL (mg/kg)
Dichlorodifluoromethane	<0.375	<0.375	<0.375	<0.375	0.375
Chloromethane	<0.375	<0.375	<0.375	<0.375	0.375
Vinyl chloride	<0.375	<0.375	<0.375	<0.375	0.375
Bromomethane	<0.375	<0.375	<0.375	<0.375	0.375
Chloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Trichlorofluoromethane	<0.375	<0.375	<0.375	<0.375	0.375
Dichlorofluoromethane	<0.375	<0.375	<0.375	<0.375	0.375
Ethyl ether	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2-Trichlorotrifluoroethane	<0.375	<0.375	<0.375	<0.375	0.375
Acetone	<0.375	0.68	<0.375	<0.375	0.375
Allyl chloride	<0.375	<0.375	<0.375	<0.375	0.375
Methylene chloride	0.53	0.43	0.53	0.54	0.375
trans-1,2-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
Methyl-tert-butyl ether	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
2,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
cis-1,2-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
2-Butanone	<0.375	<0.375	<0.375	<0.375	0.375
Bromochloromethane	<0.375	<0.375	<0.375	<0.375	0.375
Tetrahydrofuran	<0.375	<0.375	<0.375	<0.375	0.375
Chloroform	<0.375	<0.375	<0.375	<0.375	0.375
1,1,1-Trichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Carbon tetrachloride	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
Benzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dichloroethane	<0.375	<0.375	<0.375	<0.375	0.375

LEGEND TECHNICAL SERVICES, INC.

TABLE #6 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METHOD 8260/465D

VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	DSA 3 (mg/kg)	DSA 4 (mg/kg)	DSA 9 (mg/kg)	DSA 14 (mg/kg)	PQL (mg/kg)
Trichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
Dibromomethane	<0.375	<0.375	<0.375	<0.375	0.375
Bromodichloromethane	<0.375	<0.375	<0.375	<0.375	0.375
cis-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
Methyl isobutyl ketone	<0.375	<0.375	<0.375	<0.375	0.375
Toluene	<0.375	0.64	<0.375	<0.375	0.375
trans-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2-Trichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Tetrachloroethene	<0.375	<0.375	<0.375	<0.375	0.375
1,3-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
Dibromochloromethane	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dibromoethane	<0.375	<0.375	<0.375	<0.375	0.375
Chlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,1,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Ethyl benzene	0.40	4.6	<0.375	<0.375	0.375
m,p-Xylene	1.5	23	<0.375	<0.375	0.375
o-Xylene	0.61	12	<0.375	<0.375	0.375
Styrene	<0.375	<0.375	<0.375	<0.375	0.375
Bromoform	<0.375	<0.375	<0.375	<0.375	0.375
Isopropyl benzene	<0.375	0.90	<0.375	<0.375	0.375
Bromobenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	0.375
1,2,3-Trichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
n-Propylbenzene	<0.375	1.9	<0.375	<0.375	0.375
2-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	0.375
4-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	0.375

LEGEND TECHNICAL SERVICES, INC.

TABLE #6 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METHOD 8260/465D

VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	DSA 3 (mg/kg)	DSA 4 (mg/kg)	DSA 9 (mg/kg)	DSA 14 (mg/kg)	PQL (mg/kg)
1,3,5-Trimethylbenzene	<0.375	5.9	<0.375	<0.375	0.375
tert-Butylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2,4-Trimethylbenzene	0.62	23	<0.375	<0.375	0.375
sec-Butylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,3-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
4-Isopropyltoluene	<0.375	0.67	<0.375	<0.375	0.375
1,4-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dichlorobenzene	<0.375	0.57	<0.375	<0.375	0.375
n-Butylbenzene	0.97	2.7	<0.375	<0.375	0.375
1,2-Dibromo-3-chloropropane	<0.375	<0.375	<0.375	<0.375	0.375
1,2,4-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
Hexachlorobutadiene	<0.375	<0.375	<0.375	<0.375	0.375
Naphthalene	4.3	6.3	<0.375	<0.375	0.375
1,2,3-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
Surrogate Recovery Result, (Percent)					Limits
Dibromofluormethane	97.7	91.7	92.5	99.3	80-120
Toluene-d8	100	97.8	96.7	102	81-117
4-Bromofluorobenzene	98.1	100	95.6	99.0	74-121
DATE ANALYZED:	2/26/97	2/26/97, 2/28/97	2/26/97	2/27/97	----

< = Less than number shown

PQL = Practical quantitation limit

mg/kg is equal to parts-per-million

LEGEND TECHNICAL SERVICES, INC.

TABLE #6 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METHOD 8260/465D

VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	DSA 15 (mg/kg)	DSA 16 (mg/kg)	DSA 17 (mg/kg)	IS 2 (mg/kg)	PQL (mg/kg)
Dichlorodifluoromethane	<0.375	<0.375	<0.375	<0.375	0.375
Chloromethane	<0.375	<0.375	<0.375	<0.375	0.375
Vinyl chloride	<0.375	<0.375	<0.375	<0.375	0.375
Bromomethane	<0.375	<0.375	<0.375	<0.375	0.375
Chloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Trichlorofluoromethane	<0.375	<0.375	<0.375	<0.375	0.375
Dichlorofluoromethane	<0.375	<0.375	<0.375	<0.375	0.375
Ethyl ether	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2-Trichlorotrifluoroethane	<0.375	<0.375	<0.375	<0.375	0.375
Acetone	<0.375	<0.375	0.84	<0.375	0.375
Allyl chloride	<0.375	<0.375	<0.375	<0.375	0.375
Methylene chloride	0.54	0.55	0.60	<0.375	0.375
trans-1,2-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
Methyl-tert-butyl ether	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
2,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
cis-1,2-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
2-Butanone	<0.375	<0.375	<0.375	<0.375	0.375
Bromochloromethane	<0.375	<0.375	<0.375	<0.375	0.375
Tetrahydrofuran	<0.375	<0.375	<0.375	<0.375	0.375
Chloroform	<0.375	<0.375	<0.375	<0.375	0.375
1,1,1-Trichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Carbon tetrachloride	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
Benzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dichloroethane	<0.375	<0.375	<0.375	<0.375	0.375

LEGEND TECHNICAL SERVICES, INC.

TABLE #6 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METHOD 8260/465D

VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	DSA 15 (mg/kg)	DSA 16 (mg/kg)	DSA 17 (mg/kg)	IS 2 (mg/kg)	PQL (mg/kg)
Trichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
Dibromomethane	<0.375	<0.375	<0.375	<0.375	0.375
Bromodichloromethane	<0.375	<0.375	<0.375	<0.375	0.375
cis-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
Methyl isobutyl ketone	<0.375	<0.375	<0.375	<0.375	0.375
Toluene	66	<0.375	3.6	<0.375	0.375
trans-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2-Trichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Tetrachloroethene	<0.375	<0.375	<0.375	0.89	0.375
1,3-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
Dibromochloromethane	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dibromoethane	<0.375	<0.375	<0.375	<0.375	0.375
Chlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,1,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Ethyl benzene	54	<0.375	1.9	<0.375	0.375
m,p-Xylene	88	<0.375	7.2	<0.375	0.375
o-Xylene	78	<0.375	2.9	<0.375	0.375
Styrene	<0.375	<0.375	<0.375	<0.375	0.375
Bromoform	<0.375	<0.375	<0.375	<0.375	0.375
Isopropyl benzene	1.3	<0.375	<0.375	<0.375	0.375
Bromobenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	0.375
1,2,3-Trichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
n-Propylbenzene	1.1	<0.375	<0.375	<0.375	0.375
2-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	0.375
4-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	0.375

LEGEND TECHNICAL SERVICES, INC.

TABLE #6 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METHOD 8260/465D

VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	DSA 15 (mg/kg)	DSA 16 (mg/kg)	DSA 17 (mg/kg)	IS 2 (mg/kg)	PQL (mg/kg)
1,3,5-Trimethylbenzene	1.6	<0.375	0.54	<0.375	0.375
tert-Butylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2,4-Trimethylbenzene	4.7	<0.375	1.3	<0.375	0.375
sec-Butylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,3-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
4-Isopropyltoluene	<0.375	<0.375	<0.375	<0.375	0.375
1,4-Dichlorobenzene	0.40	<0.375	<0.375	<0.375	0.375
1,2-Dichlorobenzene	2.2	<0.375	0.40	<0.375	0.375
n-Butylbenzene	0.77	<0.375	<0.375	<0.375	0.375
1,2-Dibromo-3-chloropropane	<0.375	<0.375	<0.375	<0.375	0.375
1,2,4-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
Hexachlorobutadiene	<0.375	<0.375	<0.375	<0.375	0.375
Naphthalene	5.2	<0.375	0.88	<0.375	0.375
1,2,3-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
Surrogate Recovery Result, (Percent)					Limits
Dibromofluormethane	94.0	97.1	94.6	95.2	80-120
Toluene-d8	115	98.2	99.1	97.7	81-117
4-Bromofluorobenzene	99.9	92.6	94.6	91.9	74-121
DATE ANALYZED:	2/26/97, 2/28/97, 3/03/97	2/26/97	2/26/97	2/27/97	----

< = Less than number shown

PQL = Practical quantitation limit

mg/kg is equal to parts-per-million

LEGEND TECHNICAL SERVICES, INC.

TABLE #6 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METHOD 8260/465D

VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	IS 3 (mg/kg)	C3 (mg/kg)	C4 (mg/kg)	UST 1 (mg/kg)	PQL (mg/kg)
Dichlorodifluoromethane	<0.375	<0.375	<0.375	<0.375	0.375
Chloromethane	<0.375	<0.375	<0.375	<0.375	0.375
Vinyl chloride	<0.375	<0.375	<0.375	<0.375	0.375
Bromomethane	<0.375	<0.375	<0.375	<0.375	0.375
Chloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Trichlorofluoromethane	<0.375	<0.375	<0.375	<0.375	0.375
Dichlorofluoromethane	<0.375	<0.375	<0.375	<0.375	0.375
Ethyl ether	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2-Trichlorotrifluoroethane	<0.375	<0.375	<0.375	<0.375	0.375
Acetone	<0.375	<0.375	<0.375	0.84	0.375
Allyl chloride	<0.375	<0.375	<0.375	<0.375	0.375
Methylene chloride	0.58	1.2	0.45	0.67	0.375
trans-1,2-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
Methyl-tert-butyl ether	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
2,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
cis-1,2-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
2-Butanone	<0.375	<0.375	<0.375	<0.375	0.375
Bromochloromethane	<0.375	<0.375	<0.375	<0.375	0.375
Tetrahydrofuran	<0.375	<0.375	<0.375	<0.375	0.375
Chloroform	<0.375	<0.375	<0.375	<0.375	0.375
1,1,1-Trichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Carbon tetrachloride	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
Benzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dichloroethane	<0.375	<0.375	<0.375	<0.375	0.375

LEGEND TECHNICAL SERVICES, INC.

TABLE #6 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METHOD 8260/465D

VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	IS 3 (mg/kg)	C3 (mg/kg)	C4 (mg/kg)	UST 1 (mg/kg)	PQL (mg/kg)
Trichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
Dibromomethane	<0.375	<0.375	<0.375	<0.375	0.375
Bromodichloromethane	<0.375	<0.375	<0.375	<0.375	0.375
cis-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
Methyl isobutyl ketone	<0.375	5.6	<0.375	<0.375	0.375
Toluene	<0.375	3.4	<0.375	<0.375	0.375
trans-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2-Trichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Tetrachloroethene	<0.375	<0.375	<0.375	<0.375	0.375
1,3-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
Dibromochloromethane	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dibromoethane	<0.375	<0.375	<0.375	<0.375	0.375
Chlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,1,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Ethyl benzene	<0.375	<0.375	<0.375	<0.375	0.375
m,p-Xylene	<0.375	0.46	0.96	<0.375	0.375
o-Xylene	<0.375	<0.375	<0.375	<0.375	0.375
Styrene	<0.375	<0.375	<0.375	<0.375	0.375
Bromoform	<0.375	<0.375	<0.375	<0.375	0.375
Isopropyl benzene	<0.375	<0.375	<0.375	<0.375	0.375
Bromobenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	0.375
1,2,3-Trichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
n-Propylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
2-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	0.375
4-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	0.375

LEGEND TECHNICAL SERVICES, INC.

TABLE #6 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METHOD 8260/465D

VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	IS 3 (mg/kg)	C3 (mg/kg)	C4 (mg/kg)	UST 1 (mg/kg)	PQL (mg/kg)
1,3,5-Trimethylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
tert-Butylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2,4-Trimethylbenzene	<0.375	0.45	<0.375	<0.375	0.375
sec-Butylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,3-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
4-Isopropyltoluene	<0.375	<0.375	<0.375	<0.375	0.375
1,4-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
n-Butylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dibromo-3-chloropropane	<0.375	<0.375	<0.375	<0.375	0.375
1,2,4-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
Hexachlorobutadiene	<0.375	<0.375	<0.375	<0.375	0.375
Naphthalene	<0.375	0.44	<0.375	<0.375	0.375
1,2,3-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
Surrogate Recovery Result, (Percent)					Limits
Dibromofluormethane	96.0	96.1	94.4	94.4	80-120
Toluene-d8	98.8	99.8	96.9	100	81-117
4-Bromofluorobenzene	93.8	98.3	98.7	93.3	74-121
DATE ANALYZED:	2/27/97	2/27/97	2/27/97	2/27/97	

< = Less than number shown

PQL = Practical quantitation limit

mg/kg is equal to parts-per-million

LEGEND TECHNICAL SERVICES, INC.

TABLE #6 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METHOD 8260/465D

VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	FA 1 (mg/kg)	AST 1 (mg/kg)	SA 1 (mg/kg)	Method Blank (mg/kg)	PQL (mg/kg)
Dichlorodifluoromethane	<0.375	<0.375	<0.375	<0.375	0.375
Chloromethane	<0.375	<0.375	<0.375	<0.375	0.375
Vinyl chloride	<0.375	<0.375	<0.375	<0.375	0.375
Bromomethane	<0.375	<0.375	<0.375	<0.375	0.375
Chloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Trichlorofluoromethane	<0.375	<0.375	0.51	<0.375	0.375
Dichlorofluoromethane	<0.375	<0.375	<0.375	<0.375	0.375
Ethyl ether	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2-Trichlorotrifluoroethane	<0.375	<0.375	<0.375	<0.375	0.375
Acetone	<0.375	<0.375	0.88	0.51	0.375
Allyl chloride	<0.375	<0.375	<0.375	<0.375	0.375
Methylene chloride	0.59	0.76	<0.375	<0.375	0.375
trans-1,2-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
Methyl-tert-butyl ether	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
2,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
cis-1,2-Dichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
2-Butanone	<0.375	<0.375	<0.375	<0.375	0.375
Bromochloromethane	<0.375	<0.375	<0.375	<0.375	0.375
Tetrahydrofuran	<0.375	<0.375	<0.375	<0.375	0.375
Chloroform	<0.375	<0.375	<0.375	<0.375	0.375
1,1,1-Trichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Carbon tetrachloride	<0.375	<0.375	<0.375	<0.375	0.375
1,1-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
Benzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dichloroethane	<0.375	<0.375	<0.375	<0.375	0.375

LEGEND TECHNICAL SERVICES, INC.

TABLE #6 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METHOD 8260/465D

VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	FA 1 (mg/kg)	AST 1 (mg/kg)	SA 1 (mg/kg)	Method Blank (mg/kg)	PQL (mg/kg)
Trichloroethene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
Dibromomethane	<0.375	<0.375	<0.375	<0.375	0.375
Bromodichloromethane	<0.375	<0.375	<0.375	<0.375	0.375
cis-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
Methyl isobutyl ketone	<0.375	<0.375	1.0	<0.375	0.375
Toluene	0.86	<0.375	0.98	<0.375	0.375
trans-1,3-Dichloropropene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2-Trichloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Tetrachloroethene	<0.375	<0.375	<0.375	<0.375	0.375
1,3-Dichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
Dibromochloromethane	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dibromoethane	<0.375	<0.375	<0.375	<0.375	0.375
Chlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,1,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	0.375
Ethyl benzene	2.1	<0.375	0.52	<0.375	0.375
m,p-Xylene	15	<0.375	1.8	<0.375	0.375
o-Xylene	3.4	<0.375	0.77	<0.375	0.375
Styrene	<0.375	<0.375	<0.375	<0.375	0.375
Bromoform	<0.375	<0.375	<0.375	<0.375	0.375
Isopropyl benzene	<0.375	<0.375	<0.375	<0.375	0.375
Bromobenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,1,2,2-Tetrachloroethane	<0.375	<0.375	<0.375	<0.375	0.375
1,2,3-Trichloropropane	<0.375	<0.375	<0.375	<0.375	0.375
n-Propylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
2-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	0.375
4-Chlorotoluene	<0.375	<0.375	<0.375	<0.375	0.375

LEGEND TECHNICAL SERVICES, INC.

TABLE #6 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METHOD 8260/465D

VOLATILE ORGANIC COMPOUNDS - GC/MS - SOIL

Compound	FA 1 (mg/kg)	AST 1 (mg/kg)	SA 1 (mg/kg)	Method Blank (mg/kg)	PQL (mg/kg)
1,3,5-Trimethylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
tert-Butylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2,4-Trimethylbenzene	0.78	<0.375	<0.375	<0.375	0.375
sec-Butylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,3-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
4-Isopropyltoluene	<0.375	<0.375	<0.375	<0.375	0.375
1,4-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
n-Butylbenzene	<0.375	<0.375	<0.375	<0.375	0.375
1,2-Dibromo-3-chloropropane	<0.375	<0.375	<0.375	<0.375	0.375
1,2,4-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
Hexachlorobutadiene	<0.375	<0.375	<0.375	<0.375	0.375
Naphthalene	<0.375	<0.375	<0.375	<0.375	0.375
1,2,3-Trichlorobenzene	<0.375	<0.375	<0.375	<0.375	0.375
Surrogate Recovery Result, (Percent)					Limits
Dibromofluormethane	90.7	92.1	90.5	95.1	80-120
Toluene-d8	96.3	99.6	96.2	99.1	81-117
4-Bromofluorobenzene	90.7	95.9	92.5	95.3	74-121
DATE ANALYZED:	2/27/97 3/03/97	2/27/97	2/28/97	2/27/97	

< = Less than number shown

PQL = Practical quantitation limit

mg/kg is equal to parts-per-million

LEGEND TECHNICAL SERVICES, INC.

TABLE #7

LEGEND No. 97-0458

BARR ENGINEERING CO.

METALS RESULTS - WATER

Analyte	C2 (mg/L)	DSA 16 (mg/L)	Method Blank (mg/L)	PQL (mg/L)	Date Analyzed	Method Number
Silver	0.020	0.12	<0.010	0.010	2/28/97	272.1
Arsenic	0.054	0.050	<0.020	0.020	2/26/97	206.2
Barium	7.0	42	<0.050	0.050	2/25/97	200.7
Cadmium	0.032	1.0	<0.010	0.010	2/28/97	213.1
Chromium	0.94	4.6	<0.050	0.050	2/28/97	218.1
Mercury	<0.0050	0.040	<0.0050	0.0050	2/25/97	245.2
Lead	0.76	39	<0.050	0.050	2/27/97	239.1
Selenium	<0.020	<0.020	<0.020	0.020	2/26/97	270.2

< = Less than number shown

PQL = Practical quantitation limit

mg/L is equivalent to parts-per-million

LEGEND TECHNICAL SERVICES, INC.

TABLE #8
LEGEND No. 97-0458

BARR ENGINEERING CO.

METALS RESULTS - SOIL

Analyte	DSA-3 (mg/kg)	DSA-4 (mg/kg)	DSA-9 (mg/kg)	DSA-14 (mg/kg)	DSA-15 (mg/kg)	PQL (mg/kg)	Date Analyzed	Method Number
Silver	8.8	7.5	2.3	0.75	8.0	0.50	2/28/97	7760
Arsenic	14	13	4.8	3.1	47	1.0	2/27/97	7060
Barium	760	360	160	75	300	1.0	2/25/97	6010
Cadmium	110	52	2.7	0.90	44	0.50	2/28/97	7130
Chromium	82	94	16	7.3	340	2.5	2/28/97	7190
Mercury	1.1	0.58	<0.13	<0.13	3.7	0.13	3/03/97	7471
Lead	3,400	1,400	440	35	7,500	2.5	2/27/97	7420
Selenium	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	2/26/97	7740

< = Less than number shown

PQL = Practical quantitation limit

mg/kg is equal to parts-per-million

LEGEND TECHNICAL SERVICES, INC.

TABLE #8 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METALS RESULTS - SOIL

Analyte	DSA 16 (mg/kg)	DAS 17 (mg/kg)	IS 2 (mg/kg)	IS 3 (mg/kg)	C3 (mg/kg)	PQL (mg/kg)	Date Analyzed	Method Number
Silver	0.75	8.5	<0.50	0.75	9.3	0.50	2/28/97	7760
Arsenic	1.9	14	2.9	<1.0	17	1.0	2/27/97	7060
Barium	65	320	70	61	880	1.0	2/25/97	6010
Cadmium	0.50	40	<0.50	<0.50	73	0.50	2/28/97	7130
Chromium	8.7	120	8.1	6.9	89	2.5	2/28/97	7190
Mercury	<0.13	1.1	<0.13	<0.13	<0.13	0.13	3/03/97	7471
Lead	6.5	9.200	3.8	4.5	4.000	2.5	2/27/97	7420
Selenium	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	2/26/97	7740

< = Less than number shown

PQL = Practical quantitation limit

mg/kg is equal to parts-per-million

LEGEND TECHNICAL SERVICES, INC.

TABLE #8 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METALS RESULTS - SOIL

Analyte	C4 (mg/kg)	UST 1 (mg/kg)	FA 1 (mg/kg)	AST 1 (mg/kg)	SA 1 (mg/kg)	PQL (mg/kg)	Date Analyzed	Method Number
Silver	8.8	8.5	0.75	2.5	7.8	0.50	2/28/97	7760
Arsenic	9.3	24	3.1	3.9	17	1.0	2/27/97	7060
Barium	990	530	95	120	1,400	1.0	2/25/97	6010
Cadmium	44	87	1.2	3.1	69	0.50	2/28/97	7130
Chromium	81	93	25	8.0	91	2.5	2/28/97	7190
Mercury	2.6	0.63	<0.13	<0.13	2.0	0.13	3/03/97	7471
Lead	2,800	3,500	80	450	3,000	2.5	2/27/97	7420
Selenium	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	2/26/97	7740

< = Less than number shown

PQL = Practical quantitation limit

mg/kg is equal to parts-per-million

LEGEND TECHNICAL SERVICES, INC.

TABLE #8 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METALS RESULTS - SOIL

Analyte	DSAM 1 (mg/kg)	DSAM 2 (mg/kg)	DSAM 3 (mg/kg)	Method Blank (mg/kg)	PQL (mg/kg)	Date Analyzed	Method Number
Silver	4.0	4.2	5.0	<0.50	0.50	3/05/97	7760
Arsenic	<1.0	30	19	<1.0	1.0	3/04/97	7060
Barium	140	1,800	1,800	<1.0	1.0	3/04/97	6010
Cadmium	6.4	74	64	<0.50	0.50	3/05/97	7130
Chromium	.48	79	69	<2.5	2.5	3/06/97	7190
Mercury	<0.13	2.1	0.45	<0.13	0.13	3/03/97	7471
Lead	310	3,100	2,300	<2.5	2.5	2/28/97	7420
Selenium	<1.0	<1.0	<1.0	<1.0	1.0	3/04/97	7740

< = Less than number shown

PQL = Practical quantitation limit

mg/kg is equal to parts-per-million

LEGEND TECHNICAL SERVICES, INC.

TABLE #8 (continued)

LEGEND No. 97-0458

BARR ENGINEERING CO.

METALS RESULTS - SOIL

Analyte	Method Blank (mg/kg)	PQL (mg/kg) *	Date Analyzed	Method Number
Silver	<0.50	0.50	2/28/97	7760
Arsenic	<1.0	1.0	2/27/97	7060
Barium	<1.0	1.0	2/25/97	6010
Cadmium	<0.50	0.50	2/28/97	7130
Chromium	<2.5	2.5	2/28/97	7190
Mercury	<0.13	0.13	3/03/97	7471
Lead	<2.5	2.5	2/27/97	7420
Selenium	<1.0	1.0	2/26/97	7740

< = Less than number shown

PQL = Practical quantitation limit

mg/kg is equal to parts-per-million